

**REMARKS**

Claim 1 is pending in the application and is independent. Support for the amendment to claim 1 can be found in Figs. 12 and 13 and the page 8 of the specification. Reconsideration of the rejection in view of the following remarks is respectfully requested.

***Present Amendment is proper for entry***

Applicant respectfully submits that the instant amendment is proper for entry after final rejection. Applicant notes that no question of new matter is presented nor are any new issues raised in entering the instant amendment of the claims and that no new search would be required. Moreover, Applicant submits that the instant amendment places the application in condition for allowance, or at least in better form for appeal. Accordingly, Applicant requests the Examiner to enter the instant amendment, consider the merits of the same, and indicate the allowability of the present application and each of the pending claims.

***35 U.S.C. § 103 Rejection***

Claims 1, 5, 7, 11, 22, 24 and 25 were rejected under 35 U.S.C. § 103(a) for being allegedly unpatentable over U.S. Patent No. 5,096,029 to BAUER et al. in view of U.S. Patent No. 3,183,064 to SIGSWORTH. This rejection is respectfully traversed.

The Examiner asserts that BAUER discloses all of the features recited in the above-noted claims including the integrally formed washer-shaped boss body 46. While

acknowledging that BAUER lacks, among other things, the recited streamlined recess portion(s) or the recited inwardly contoured trough(s), the Examiner nevertheless explains that this feature is taught by SIGSWORTH and that it would have been obvious to combine the teachings of these documents. Applicant respectfully submits that a *prima facie* case of obviousness has not been established as the applied references fail to teach each and every element of the claims.

Applicant submits that neither BAUER nor SIGSWORTH disclose or suggest the combination of features recited in at least independent claim 1. Applicant also submits that no proper combination of these documents disclose or suggest the combination of features recited in at least claim 1.

Applicant notes that Independent claim 1 recites, among other things,

an integrally formed washer-shaped boss body portion formed at a lower end of the opening/closing pin, the washer-shaped boss body having a non-conical surface which is structured and arranged to contact an axial end surface in the pipe holder, wherein the at least one streamlined recessed portion has an entirely closed perimeter defined by a non-recessed portion of the outer peripheral surface.

Applicant acknowledges BAUER apparently discloses a pin having a lower end portion 46 which is integrally formed with the pin. However, Applicant submits that the lower end portion 46 in BAUER is not a washer-shaped boss or boss body, much less, one having a non-conical surface which is structured and arranged to contact an axial end surface in the pipe holder. Applicant notes that Webster's II *New College Dictionary*, defines the term washer as "[a] small perforated disk ..." and the term disk as "[a] thin, flat, circular plate." Moreover, this definition is entirely consistent with the

pins shown in Figs. 12 and 13 of the instant application. As the Examiner will note from Figs. 12 and 13, the integrally formed washer-shaped boss bodies 161 and 171 of the pins 160 and 170 are clearly illustrated as having a thin, flat, circular plate configuration. Moreover, Figs. 2 and 3 illustrates how the flat upper surface of the washer-shaped boss contacts (Fig. 2) a flat lower surface of a washer-shaped member arranged within the pipe holder 70.

With this definition in mind, Applicant does not dispute that BAUER discloses at col. 4, lines 13-16, that the valve body or pin 38 includes a sealing bead 43 which is described as "a valve disk 46". However, it is clear from the drawings that the so-called "valve disk 46" is not in fact disk-shaped. Instead, Figs. 2, 5 and 6 show that the device 46 has a lower planar surface and an upper tapered or conical surface 45. Applicant notes that each of the disclosed embodiments clearly utilizes a tapered or conical section 45 and 45'. Indeed, the specification at col. 4, lines 14-15 describes section 45 as having "the shape of a truncated cone" (see also col. 5, lines 59-60). Thus, Applicant submits that, contrary to the Examiner's assertions, BAUER does not disclose or suggest a pin that includes an integrally formed washer-shaped boss or boss body.

The differences between BAUER and the claimed invention are not insignificant. Whereas the invention provides for engaging contact between the flat axial upper end surface of the washer-shaped boss and a corresponding surface in the pipe holder 70 (see e.g., Fig. 2 of the instant application), BAUER merely provides for contact between angled conical surface 45 and an inner edge of the member 43.

Nor would it have been obvious to one of ordinary skill in the art to remove the tapered section 45/45' of the pin in BAUER in order to produce a pin or valve body that has a washer-shaped boss or boss body. BAUER, in fact, teaches away from this modification. As the Examiner will note from col. 4, lines 16-27, the truncated cone shaped sealing face 45 is made conical in order to sealingly engage the bead 43. Moreover, by utilizing the conical section 45/45', BAUER ensures that "the sealing beads 43, 44 are axially not compressed" (see col. 4, lines 26-27). This asserted benefit would not result if the conical section 45/45' were removed or if the portion 46 were modified to have a washer-shaped boss body.

Moreover, SIGSWORTH discloses subject matter which is unrelated to that of BAUER or the invention. SIGSWORTH relates to a fluidized bed gas inlet nozzle (see col. 1, lines 11-15) and has nothing to do with a gas opening/closing pin for a height regulating body or gas spring, so as to justify its combination with BAUER - which at least relates to a gas spring. Applicant notes, in particular, that the pin 10 in SIGSWORTH, while arguably participating in the opening and closing of the head 13, is not arranged within a gas spring, and is clearly not used to open and close an inlet or an inlet and outlet of a pipe holder as recited in claim 1.

Nor can SIGSWORTH cure the above-noted deficiencies of BAUER. While Applicant does not dispute that SIGSWORTH discloses a streamline recessed portion or longitudinal inwardly continuously contoured trough 14/14a arranged on what could arguably be called a pin 10, it is clear that SIGSWORTH does not disclose or suggest a

gas opening/closing pin for a pipe holder, much less, one which utilizes an integrally formed washer-shaped boss or boss body.

Applicant notes that Independent claim 1 also recites, among other things,

at least one streamlined recess portion which the gas inlet and outlet formed on a side of an outer peripheral surface of a central portion of the gas opening/closing pin and that the at least one streamlined recessed portion has an entirely closed perimeter defined by a non-recessed portion of the outer peripheral surface.

While the Examiner has acknowledged that BAUER lacks the recited streamlined recess portion or trough and suggested that, because SIGSWORTH discloses such a feature, one of ordinary skill in the art would substitute the cylindrical recess (defining chamber 50) with the recess 14 of SIGSWORTH, the Examiner has failed to explain why one would look to the non-related art of fluidized bed gas inlet nozzles (as disclosed in SIGSWORTH) to solve a problem relating to a gas spring. Applicant notes, in particular, that while the recess in BAUER (as well as that of the invention) allows for gas flow within a pipe holder of a gas spring, the recesses 14 of SIGSWORTH merely allow for gas flow through a support 11.

Nor has the Examiner identified any language in BAUER or SIGSWORTH which would suggest any benefit in replacing the cylindrical recess (defining chamber 50) of BAUER with one or more recesses or troughs of SIGSWORTH. Applicant notes, in particular, that while SIGSWORTH discloses that the recess 14 “may be milled out of the stem 10” (see col. 3, lines 24-27), there is no language in SIGSWORTH which

would support the Examiner's assertion that this would "cut down on the machining costs".

As the prior art documents lack the requisite motivation or rational for combining BAUER with SIGSWORTH, Applicant submits that the Examiner is improperly using Applicant's disclosure to provide the motivation to combine these documents. While Applicant has explained in the instant application that making the washer-shaped boss or boss body reduces "manufacturing costs" because "a separate washer is not needed", such language is not related to how the recess or trough is formed. Nor is this concern expressed in the prior art cited by the Examiner. Thus, the Examiner's reasons or rational for replacing the cylindrical recess of BAUER with the recess 14 of SIGSWORTH are entirely of the Examiner's making and completely unsupported by any teachings of the applied documents.

Furthermore, in addition to failing to disclose the combination of features recited in the above-noted claim 1, Applicant submits no proper combination of these documents discloses or suggests the combination of features recited in claim 1.

Accordingly, Applicant respectfully submits that the above-noted rejection under 35 U.S.C. § 103(a) should be withdrawn.

### **CONCLUSION**

In view of the foregoing remarks, Applicant submits that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue.

The Examiner is invited to contact the undersigned at the telephone number listed below, if needed.

Respectfully submitted,  
S. R. JO

A handwritten signature in black ink, appearing to be 'Andrew M. Calderon', with a large, stylized flourish at the end.

Andrew M. Calderon  
Reg. No. 38,093

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GREENBLUM & BERNSTEIN, P.L.C.  
1950 Roland Clarke Place  
Reston, VA 20191  
703-716-1191